## Appendix B - Tornado Myths, Facts, Safety, Shelter, and Signs

# **Tornado Myths**

- <u>Tornadoes can not cross water.</u> Tornadoes can cross water and sometimes even begin over water as tornadic waterspouts.
- Opening the windows will equalize the pressure. Forget the old notion of opening windows to equalize pressure, it just doesn't matter. It is much more important for you to move to a safe area away from windows and exterior walls! In a tornado every second counts, use your time wisely and protect yourself and others by taking cover.
- Go to the southwest corner of the basement. The southwest corner is no safer than any other part of the basement. The "safe southwest corner" myth was based on the belief that, tornadoes often come from the southwest, so the debris would fall into the northeast side of the basement. The truth is that tornadoes can come from any direction and the direction the debris will fall is not consistent so the southwest corner is no better than any other corner. In general, the basement, under a workbench, stairs, table, mattress or other sturdy objects, offer the best protection from a tornado and flying debris.
- The larger the tornado the stronger. This myth is false. The appearance or size of a tornado are not necessarily an indication of its intensity. Visually "small or narrow" tornadoes can be very intense with very high wind speeds and tornadoes that "look like an F5 on TV(or in person)" can be less intense with lower wind speeds. The F-scale given to a tornado isn't related to the size of the tornado, it is based on the destruction done to objects as it passes. Appendix F contains the Fujita Scale, the scale used to categorize tornadoes.

#### **Tornado Facts**

### **Difference between Tornado Watches and Warnings**

**A tornado watch means** that severe weather is possible in the next several (1-6) hours. It does not mean tornadoes are imminent. It simply means that you need to be alert to the weather conditions and be prepared to go to safe shelter if warnings are issued. This is a good time to review your emergency action plans in the event they are needed later.

**A tornado warning means** that a tornado has been spotted, or that Doppler radar indicates a thunderstorm circulation which is strongly associated with tornadoes. When a tornado warning is issued for your county, take immediate action to protect yourself and those you are responsible for. The National Weather Service in your area issues warnings to provide you time to take cover.

### Difference between Tornado and Severe Thunderstorm Wind Damage

- Tornadoes are part of the updraft in a thunderstorm. Tornadic debris and damage is typically swept toward a central line along the track of the tornado. The area of most intense damage is typically fairly narrow.
- Wind Damage from Thunderstorm Winds, often called Downbursts, Derechoes, Straight-Line Winds, or Wind Shear. Downbursts, true to their name are a down rush of air out of a thunderstorm. This air exiting a thunderstorm spreads out as it reaches the ground. This tends to spread damage and debris out in a divergent pattern and over a much wider area than tornadoes. At

their most extreme, these wind gusts can create winds as strong as an F2 tornado over small areas or areas many miles wide.